

## **REMARKS**

Claims 1 and 10 have been amended. Therefore, claims 1-17 are pending in the present application and are respectfully submitted for reconsideration.

Claims 1, 3, 10, and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,077,733 to Whipple ("Whipple") in view of U.S. Patent No. 6,697,906 to Ayukawa et al. ("Ayukawa"); claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Whipple in view of Ayukawa and further in view of U.S. Patent No. 5,684,505 to Takita et al. ("Takita"); and claims 2, 4-9, 11, and 13-16 were objected to as being dependent on a rejected claim, but were described as being allowable if rewritten in independent form.

The Applicants respectfully note that independent claim 1 has been amended and recites, in part, a shared bus system comprising an arbiter circuit coupled to a bus, a first circuit and a second circuit to receive requests for an exclusive right to use the bus from the first circuit and the second circuit to arbitrate the requests between the first circuit and the second circuit, wherein the second circuit releases the exclusive right to use the bus in response to detection of a predetermined number of counting operations performed by a counter circuit after acquiring the exclusive right to use the bus from the arbiter circuit.

The Applicants submit that none of the cited references discloses or suggests at least a shared bus system wherein a second circuit releases the exclusive right to use a bus in response to detection of a predetermined number

of counting operations performed by a counter circuit after acquiring the exclusive right to use the bus from an arbiter circuit

Whipple teaches a plurality of nodes arranged in a circular configuration wherein one of the nodes is selected as an anchor node that has the highest priority in terms of bus access. When the anchor node accesses the bus a predetermined number of times so that the count of the counter reaches a predetermined number, the highest priority is given to another node that is the next node in the circle. This node then serves as a new node.

In Whipple, the highest priority is successively handed over to the next node in the circle after a predetermined number of accesses are performed. In contrast, in the amended claim 1, the exclusive right to use the bus is released after a predetermined number of counting operations are performed by the counter circuit.

The exclusive right to use the bus is different than the highest priority. In the invention of amended claim 1, the exclusive right to use the bus is limited by the number of accesses to the bus, thereby preventing the master from using the bus exclusively for a long time. In Whipple, it is only the highest priority that is limited by the number of accesses, so that the master using the bus can continue to use the bus exclusively for a long time.

Whipple does not disclose or suggest that a node with the highest priority has the exclusive right to use the bus. Instead, Whipple describes that “node 603(a) may access the bus, either because no preceding node wants to access it or because node 603(1) is the current anchor node.” (See Column 21, Lines 29-

31). In addition, Whipple differentiates highest priority from the exclusive right stating "[t]he leftmost node 503(1) has the highest priority, and each succeeding node 503 has a lower priority than the one preceding it. Thus, if node 503(1) and another node 503(a) request access simultaneously, node 503(1) receives the access." (See Column 1, Lines 42-46). A node with the highest priority does not have the exclusive right to use the bus.

Neither Ayukawa nor Takita cure the deficiency in Whipple.

With regard to each of the rejections under §103 in the Office Action, it is also respectfully submitted that the Examiner has not yet set forth a *prima facie* case of obviousness. The PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 U.S.P.Q.2nd 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re

Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002).

In the Office Action, the Examiner merely states that the present invention is obvious in light of the cited references. See, e.g., Office Action at pages 3-5. This is an insufficient showing of motivation.

Therefore, the Applicants submit that claim 1, as amended, is allowable over the cited art, for at least these reasons. Claim 10 has been amended similar to claim 1, to recite, in part, acquiring the exclusive right to use a shared bus from an arbiter circuit. For reasons similar to those discussed above for claim 1, the Applicants submit that claim 10, as amended is allowable over the cited art for at least these reasons.

Claims 2-9 and 11-17 depend from claims 1 and 10 and include further limitations. As claims 1 and 10 are allowable, the Applicants submit that claims 2-9, and 11-17, which depend from claims 1 and 10 are likewise allowable for at least these reasons.

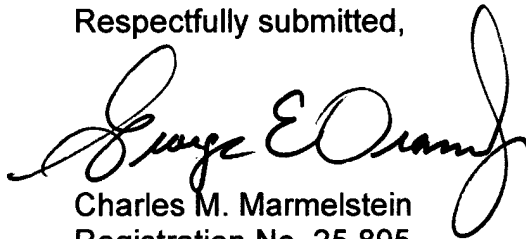
## Conclusion

For all of the reasons set forth above, Applicants respectfully submit that each of claims 1-31 and 63 recites subject matter that is neither disclosed nor suggested in the cited art. Applicants therefore respectfully request that claims 1-31 and 63 be found allowable and that this application be passed to issue.

If for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper has not been timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300 referencing Attorney Docket No. 100353-00180.

Respectfully submitted,



Charles M. Marmelstein  
Registration No. 25,895

27931

Customer No. 004372  
ARENT FOX, PLLC  
1050 Connecticut Avenue, N.W., Suite 400  
Washington, D.C. 20036-5339  
Tel: (202) 857-6008  
Fax: (202) 857-6395